## 7. Asante

## FriendIINET ${ }^{*}$ FM2008/9

## 8 port 10/ 100 Switches with uplink options



Models - 8 ports 10/ 100 Auto Uplink® MDI/ MDI-X with or without 100BaseFX fiber uplinks (multimode 2km)
SNMP/Web/TeInet/Console Management
High Level Quality of Service for delivering Multiservice technologies (IP Voice, Video, data)
> IEEE 802.1p-2 Queues
> Three scheduling schemes with Delay Bound (First Come First Served, All High Before Low, Weighted Round Robin)

IEEE 802.1Q VLAN, tagging, port based IVL/ SVL, protocol based and GVRP/ GARP supported
IEEE 802.1ad/802.3ad Port Trunking and LACP
Multicast Support - IGMP snooping 1000 Groups
Port Mirroring
Broadcast Storm Control and Broadcast Filtering
Static MAC address support, MAC address filtering
Port Security
Internal Power - 90-240VAC auto-ranging

## Desktop, wallmount or 19" Rackmounting

The FM2009 is an 8-port 10/ 100BaseTX switch with or without an additional 100BaseFX backbone uplink. The switch supports multimode fiber options for campus, inter-building or connection to metro backbone. This feature rich switch comes with 19" rackmount brackets and at a price that's un-matched by other vendors.

Built as an Enterprise Performance switch the FM2009 is affordable enough to use at the end of a 100BaseFX fiber run for workgroups or Broadband over Ethernet delivery to tenanted buildings or Fiber to the Home.

The FM2009 switches are engineered for, low cost workgroups as desktop connectivity in small offices, departmental workgroups in Education and Medium Sized Enterprise with fiber connected backbones to servers or central distribution switches interconnected by fiber. With features such as Port and Protocol based VLAN's, Class of Service with IGMP multicasting and Port Trunking, this low cost switch offer highest possible performance.

For Multi-Tenant, Multi Dwelling and Fiber to the Home applications, the FM2009 is very suitable as a Tenant Access Device (TAD).

Used in networks that include the Asante IC3524, 3548, and the Asante 35160 backbone fiber distribution switches, Asante offers an end-to-end, managed fiber solution, which is unequalled.

Asante is a leading provider to the fiber application network user, with the widest range of managed and unmanaged fiber connected workgroup, desktop, backbone switches and network cards.

## SPECIFICATIONS

| Connectors: | Fast Ethernet (100BaseTX, 10BaseT): RJ-45 <br> Fiber (100BaseFX): Choice of SC <br> Console: Serial (RS-232): DB9 |
| :--- | :--- |
| Firmware: | Reboot to reset defaults; Xmodem and TFTP supported |
| System: | Single chip, low power, non-blocking, store-and-forward, shared memory, embedded 2Mbit <br> packet memory and 1Mbit control memory. |
| Console <br> Out-of-Band Administration: Microsoft HyperTerminal (or equivalent) with COM port to Console Default Console Settings: 9600 baud, <br> 8 data bits, 1 stop bit and no flow control Interface: Menu-driven Configuration: Port status, Port counter statistics, System Information, <br> Switch settings |  |

## Management

SNMP: MIB II and Bridge MIB supported; community strings and Trap management with both Read and Write Web:
Embedded HTTP server for Web Browser management IE5 (or above). Telnet: Supported

## Features

Port Trunking: IEEE802.1ad/802.3ad - LACP with load distribution control and failover recovery, Up to four groups can trunk up to 8 ports on an aggregated Bandwidth of 1600Mbps in each group Quality of Service: IEEE802.1Q Quality of Service supported. Class of

Service: IEEE802.1p Class of Service supported. 2 priority queues based on three scheduling schemes with Enable Delay Bound:
-First come First Served,
-All High before Low (Strictly Priority),
-Weighted Round Robin Schedule, High or Low Weight.

| VLAN: | IEEE802.1Q VLAN tagging; 4095 groups based on Ingress rule. Static and dynamic <br> configuration, includes |
| :--- | :--- |
|  | Tag insertion, modifications and removal, cross VLAN packet filtering. Port based: Port based <br> VLAN supported; IVL/SVL. Protocol based: IEEE802.1V supported, 512 entries (IP, IPX, STP, <br> AppleTalk, ARP, NetBIOS) GVRP: Supported, on or off configuration option. |
| Multicast: | Supports IGMP multicast snooping; Query, <br> Report and Leave group. IGMP address table: <br> 1000 entries |
| Broadcast: | Supports Broadcast Storm Control and Broadcast Filtering; Head-of-Line Blocking. |
| Port Security: | Static MAC address prevention to unauthorized access <br> and access limited to MAC address numbers |
| Port Mirroring: | Port sniffer with Source port, destination port, and source-destination-pair based. |
| Filter Database: | Forwarding and filtering IGMP snooping per multicast group, Static MAC address, MAC filtering <br> allows the switch to drop unwanted traffic against a table list, of preconfigured MAC addresses. |
| Spanning Tree: | IEEE 802.1D supported. |

## Performance

Forwarding and Filtering Rate: 10 Mbps Ethernet: 14,880 packets/second (wire speed on all ports)
100 Mbps Fast Ethernet: 148,800 packets/second (wire speed on all ports) Address Table: 8K MAC entries (auto learning with
migration) Buffer Memory: 3MB shared

## Installation

Dimensions: $254 \times 132 \times 37 \mathrm{~mm}$ ( $10^{\prime \prime} \times 5.2^{\prime \prime} \times 1.5^{\prime \prime}$ ), desktop, wall mount or rackmount.
Weight: 2.4lbs Status Indicators: Per RJ-45 port: link, activity, FD/collision and speed
(10/100 Mbps) Per fiber port: link/activity, FD/collision System: power

## Environmental Range

Operating Temperature: $32^{\circ}$ to $113^{\circ} \mathrm{F}\left(0^{\circ}\right.$ to $45^{\circ} \mathrm{C}$ ) Storage Temperature: $-40^{\circ}$ to $85^{\circ} \mathrm{C}$ Relative Humidity: $10 \%$ to $90 \%$ non-condensing Power: $90-240$ VAC, $50-60 \mathrm{~Hz}$; maximum 17 watts

| Standards Compliance |  |
| :--- | :--- |
| Network: | IEEE 802.3u Fast Ethernet over UTP Category 5 100BaseTX) IEEE 802.3 Ethernet over UTP <br> Category 3 (10BaseT) IEEE Auto Negotiation with Auto-Uplink |
| Features: | IEEE802.1q, IEEE802.1v, IEEE802.1s, IEEE802.1w, IEEE802.1p, IEEE802.1ad, IEEE802.1D, <br> IEEE802.1x |
| Maximum Distance: | 10BaseT and 100BaseTX: 328 feet (100 meters) <br> with auto negotiation 100BaseFX (multi-mode): 2 <br> KM (full duplex), 412 M (half duplex) 100BaseFX <br> (single mode): 15/30/60 KM (full duplex), 412 M (half <br> duplex) |
|  | UL 1950 and cUL Emissions: FM2009: FCC Class A, CE |

Support
Freetechnical support and warranty:Two years of freetelephone support, 24 -hour support via web and ftp, two year product warranty

## ORDERING INFORMATION

## Model Description Asanté Part Number*

FM2008 8 port 10/100 switch NO uplink 99-00705-01**
FM2009-MMC 8 port 10/100 switch plus 100BaseFX fiber port, multimode SC connectors 99-00685-01
FM2009-SMC15 8 port 10/100 switch plus 100BaseFX fiber port, singlemode SC connectors 15km 99-00775-01** FM2009-SMC30 8 port 10/100 switch plus 100BaseFX fiber port, singlemode SC connectors 30 km 99-00775-31** FM2009-SMC60 8 port 10/100 switch plus 100BaseFX fiber port, singlemode SC connectors 60km 99-00775-61**

[^0]** For availability please contact sales


[^0]:    * For international part numbers, please refer to the Asante price list.

